

**Draft Five-Year Plan
For The
Waste Tire Recycling Management Program**

(6th Edition Covering Fiscal Years 2011/12-2015/16)

Draft Report to the Legislature

November 8, 2010 Workshop

The following document is a draft report that contains only the proposed activities and budgets for FYs 2011/12-2015/16. The full version of the draft report that contains program status, objectives, performance measures, activities, budgets and appendices will be presented during a CalRecycle workshop to be held tentatively in March 2011.

Five-Year Plan for the WasteTire Recycling Management Program

Senate Bill (SB) 876 (Escutia, Statutes of 2000, Chapter 838) was enacted to provide a comprehensive measure to extend and expand California's regulatory program related to the management of waste and used tires. One of the key provisions of this measure requires the Department of Resources Recycling and Recovery (CalRecycle) to adopt and submit to the legislature a Five-Year Plan (Plan) that included proposed budget allocations. In addition, it requires that the Plan be updated every two years. The current Plan was adopted in May 2009 covers Fiscal Years (FYs) 2009/10-2013/14. Staff has begun the process to revise the plan to cover FYs 2011/12 to 2015/16. The following table is a summary of draft proposed expenditures for FYs 2011/12-2015/16. Further details of each program area are contained in this draft Plan. We anticipate the next version of the draft revised Plan will be presented during a CalRecycle workshop in March 2011 and the final revised Plan will be submitted for approval in May 2011.

Table 1: Total Tire Program Funding for Fiscal Years 2011/12-2015/16

Program Areas	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	Totals for All Fiscal Years
Enforcement	\$8,360,000	\$8,840,000	\$9,090,000	\$9,090,000	\$9,090,000	\$44,470,000
Hauler and Manifest Program	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$2,250,000
Cleanup*	\$4,100,000	\$4,000,000	\$3,900,000	\$3,900,000	\$3,900,000	\$19,800,000
Research	\$1,000,000	\$1,000,000	\$1,500,000	\$1,000,000	\$1,500,000	\$6,000,000
Markets	\$21,104,000	\$20,724,000	\$20,074,000	\$20,574,000	\$20,074,000	\$102,550,000
Program Staffing and Administration	\$4,916,000	\$4,916,000	\$4,916,000	\$4,916,000	\$4,916,000	\$24,580,000
Administration	\$1,832,000	\$1,832,000	\$1,832,000	\$1,832,000	\$1,832,000	\$9,160,000
Mandatory Contracts	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$7,500,000
Totals	\$43,262,000	\$43,262,000	\$43,262,000	\$43,262,000	\$43,262,000	\$216,310,000

* The cleanup element includes the Farm and Ranch Solid Waste Cleanup and Abatement Grant Program. Its spending authority is separate from the Tire Fund's spending authority.

Introduction

The Five-Year Plan is divided into the program elements identified in Public Resources Code (PRC) section 42885.5(b). These elements are:

- Enforcement and Regulations Relating to the Storage of Waste and Used Tires.
- Cleanup, Abatement, or Other Remedial Actions Related to Tire Stockpiles Throughout the State.
- Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires.
- Market Development and New Technology Activities for Waste and Used Tires.
- The Waste and Used Tire Hauler Program and Manifest System.

Each element includes an overall chart of activities and describes each activity with associated budget information by fiscal year.

Enforcement and Regulations Relating to the Storage of Waste and Used Tires

Activity Description and Budget

The enforcement program will implement a two-pronged approach to statewide enforcement which will use local enforcement entities wherever possible and State resources in “gap” areas. The waste tire enforcement program will provide ongoing assistance to local jurisdictions and oversee the entire effort. Table 3 provides a list of activities and associated budgets for the Enforcement and Regulations Relating to the Storage of Waste and Used Tires Element.

Table 3: Budget for Enforcement and Regulations Relating to the Storage of Waste and Used Tires

Program Area	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY2015/16
Waste Tire Enforcement Support Activities	\$370,000	\$375,000	\$375,000	\$375,000	\$375,000
Enforcement Case Assistance	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Local Government Waste Tire Enforcement Grants	\$7,775,000	\$8,000,000	\$8,250,000	\$8,500,000	\$8,500,000
Database Development and Maintenance	\$165,000	\$415,000	\$415,000	\$165,000	\$165,000
Totals	\$8,360,000	\$8,840,000	\$9,090,000	\$9,090,000	\$9,090,000

- 1. Waste Tire Enforcement Support Activities:** This line item has changed over time based on needs and lessons learned and is a combination of several activities and agreements that will support the overall mission of enforcing the laws regarding the hauling and disposal of waste and used tires in the State of California and along the California/Mexico border region. This combined activities approach will provide flexibility with respect to program funding for each activity. Approximately one-third of the budgeted amount allocated per fiscal year for these activities will be used for activities along the Mexican border region in California. Funds will be allocated to the following projects:

California Highway Patrol (CHP) Agreement to Support Enforcement Activities: This effort continues to enhance the working relationship that has been established between CalRecycle and the CHP. Under this agreement the CHP will continue to support CalRecycle’s field efforts in the areas of ground and aerial surveillance, covert and overt investigations, inspector security, training for state and local law enforcement officers, and roadside checkpoints to assist CalRecycle as well as local enforcement personnel. If the CHP is unable to continue this work due to budget or priority issues, CalRecycle will pursue a similar agreement with other law enforcement agencies. This effort includes a surveillance and enforcement support focus in the California/Mexico border region.

Satellite Surveillance Project: CalRecycle has had two contracts to use currently available satellite imagery to review and analyze large sections of land to determine whether the technology was useful and whether staff could generate such maps quickly and easily in-house. The technology was useful in finding tire piles located in remote and isolated areas of Central and Northern California having limited visual access and the large desert regions in Southern California including the

California/Mexico border region. However, use of the technology requires use of highly trained and skilled aerial photo interpreters, so the former California Integrated Waste Management Board directed staff to consider future contracts if/when the technology is more readily usable by staff.

Air Resources Board (ARB) Surveillance Assistance: This activity supports field investigative efforts by CalRecycle and local enforcement waste tire grantees. The ARB has extensive experience in assisting other agencies in the purchase, maintenance, monitoring, and use of both covert and overt surveillance equipment. ARB's expertise has aided and should continue to aid CalRecycle and local waste tire grantees in their efforts to deter, or find and prosecute those individuals who illegally haul or dispose of tires. Additionally, work should be done toward procuring more sophisticated surveillance equipment for covert activities allowing real-time remote monitoring and sensing.

Analysis of Targeted Study Areas for Waste Tire Enforcement: Provide site/topic specific studies that target issues relating to the enforcement of used and waste tire laws in California. This activity will provide CalRecycle with the flexibility to respond to situations that arise, which may not have been previously under consideration. For instance, Senate Bill 772 (Ducheny, Chapter 214, Statutes of 2005) required CalRecycle to track the flow of both legal and illegal waste and used tires through the California/Mexico border. *Note: The California/Mexico border tire flow report was completed and there are no plans to do another report at this time.*

Training Support for Waste Tire Enforcement Inspectors and Managers: This activity continues work with law enforcement to provide comprehensive and up-to-date training that focuses on tire enforcement and environmental compliance in support of training for both law enforcement and grantees. In addition, funds will be used to supplement the tire portion of CalRecycle's annual enforcement conference for local agencies. Training provides inspectors and managers with up-to-date information on CalRecycle's waste tire management programs and grants, as well as a venue to network and discuss other items of interest. Other outreach activities may also be held during the year. CalRecycle held a series of in-depth workshops for a limited number of CHP and local grantees in 2008. The training was successful and additional training should be considered to increase the number of trained law enforcement and grantees.

Activity Funding

FY 2011/12.....\$370,000
FYs 2012/13–2015/16.....\$375,000 per fiscal year

2. **Enforcement Case Assistance:** CalRecycle's Legal Office generally prosecutes administrative enforcement penalty actions to ensure uniformity of enforcement and to expedite processing. However, criminal and certain civil enforcement cases must be referred to local district attorneys' offices. Unfortunately, some rural jurisdictions do not have the resources to handle waste tire misdemeanor cases. In fiscal year 2001/02, CalRecycle established a two-year pilot program with the California District Attorneys Association to assist these jurisdictions. While the pilot project proved successful, recently the California District Attorneys Association was able to utilize almost no funds. Therefore, CalRecycle will no longer fund work with the California District Attorneys Association. CalRecycle will continue to work with authorized enforcement organizations as contractor(s) or grantee(s) for investigative and prosecutorial services to pursue criminal or civil enforcement actions.

Activity Funding

FYs 2011/12- 2015/16.....\$50,000 per fiscal year

3. **Local Government Waste Tire Enforcement Grants:** PRC section 42889(b)(4) allows CalRecycle "to consider designating a city or county, or city and county as the enforcement authority of

regulations relating to the storage of waste and used tires.” This section also states that if CalRecycle designates a local entity for this purpose, it must provide sufficient, stable, and noncompetitive funding to that entity, based on available resources.

The purpose of this grant program is to enhance the statewide waste tire enforcement infrastructure in California. This grant program will augment CalRecycle’s enforcement efforts in overseeing the proper management and flow of waste tires throughout the state. Eligible county and city jurisdictions can use these grant funds to identify waste tire sites, conduct waste tire facilities inspections, investigate illegal tire disposal activities, review waste tire hauler documents, issue Notice of Violations, and ensure that tire dealers, auto dismantlers, tire haulers, and others comply with all applicable laws, storage standards, and manifest requirements. The priorities for this grant program are to:

- Offer a sufficient, stable, and non-competitive funding source;
- Ensure consistent statewide inspection and enforcement coverage;
- Ensure cost-effective and successful local waste tire enforcement programs;
- Streamline the grant program application, annual renewal, and reporting process;
- Conduct evaluations to assess grantee performance and enforcement program effectiveness.

Participation in this grant program continues to increase. There were just eight grantees in FY 2001/02, and 42 in FY 2007/08. As a direct result of the waste tire enforcement grants, local agencies have a much more vital and expanded role in enforcement.

The program criteria was expanded in FY 2007/08 to allow grantees reimbursement for a higher hourly personnel rate, increased surveillance costs, and cleanup of small tire piles.

Activity Funding

FY 2011/12.....	\$7,775,000
FY 2012/13.....	\$8,000,000
FY 2013/14.....	\$8,250,000
FYs 2014/15-2015/16.....	\$8,500,000 per fiscal year

- 4. Database Development and Maintenance:** CalRecycle has developed the Waste Tire Management System (WTMS) to track tire enforcement and manifest program activities. The database system was developed per the requirements defined in the approved Feasibility Study Report. The system tracks waste tire generators, registered haulers, permitted and unpermitted end use facilities, manifest forms, inspection forms, and enforcement actions.

The system was initially released to “production” in July 2003. While the system meets the requirements outlined in the feasibility report and has been in production for several years, several enhancements are needed to improve functionality and integration of information within the system. Ongoing maintenance costs and continuous improvements are \$165,000 per fiscal year. Continuous improvements to better service our staff and external customers will include:

- Development of standard reports to track inspection data, permit data, grantee referrals, and Notice of Violations to ensure performance measures are achieved. Compliance reports will be available to grantees to assist them in inspection prioritization and planning.
- Ongoing maintenance that includes revising inspection forms, entering into contracts to have inspections forms and other documents scanned and entered into the database on an ongoing

basis. Additionally, periodic upgrades to the system are anticipated as the program continues to grow and change to meet the needs of our internal and external stakeholders as well as reporting requirements requested by Cal/EPA

The WTMS automated system was originally developed in 2003 to meet the business needs in place at that time. There have been substantial changes made to WTMS over the years to expand functionality and to reflect changes in the tire program business requirements (e.g., transition from original individual manifest process to the Comprehensive Trip Log (CTL) form (CIWMB 203) process. In general, we believe that the current WTMS system meets the primary existing business needs of the program. At the same time, the Information Management Branch (IMB) regularly evaluates existing systems and their technology platform as part of an ongoing process to continually enhance the IT application development environment used for development of automated systems at CalRecycle. IMB will consider changes to our existing development practices to take optimal advantage of the new database development environment, Visual Studio 2010. The WTMS system was originally developed using older technologies, although there have been substantial upgrades over the years.

IMB believes it is prudent to plan to conduct a reassessment of the business requirements of the WTMS program, and an assessment of the technical capabilities of the existing automated system to meet those requirements. This assessment will consider the costs and benefits of revising the existing system or redeveloping the system based on available technologies and systems available at the time of the assessment. Where appropriate, detailed specifications will be developed to describe revisions needed to meet proposed business needs. This assessment, specifications, and possible enhancements will be documented to the level necessary. Where possible, proof-of-concept demonstration systems will be developed to demonstrate the proposed capabilities of any new or revised automated system

It is proposed that this assessment and development effort be conducted over a two-year period beginning July 2012, It is further proposed that \$250,000 be earmarked for each twelve-month period (FY 2012/13 and FY 2013/14) to allow for the hiring of experienced Information Technology (IT) contractors with appropriate skills to assist with this assessment effort.

Activity Funding

FY 2011/12.....	\$165,000
FYs 2012/13-2013/14.....	\$415,000 per fiscal year
FYs 2014/15-2015/16.....	\$165,000 per fiscal year

Waste and Used Tire Hauler Program and Manifest System

Activity Description and Budget

The Hauler and Manifest Program is a general line item budget as shown in Table 4 Budget for the Waste and Used Tire Hauler Program and Manifest System. The costs associated with this budget are printing and mailing of the Comprehensive Trip Log forms; training and educational materials; contracting with an outside source for data entry of the trip log forms; an Information Management Branch annual budget for manifest and hauler registration related upkeep and maintenance of the Waste Tire Management System. Additionally, funds provide printing of the waste tire hauler decals and certificates as well as Tire Program Identification Number certificates.

Table 4: Budget for the Waste and Used Tire Hauler Program and Manifest System

Program Area	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
Hauler Program and Manifest System	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000
Totals	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000

- 1. Hauler Program and Manifest System:** With CalRecycle’s approval of the trip log form, the overall costs for the manifest program has been reduced as less printing, postage, and processing time is necessary. The numbers presented in Table 4 for “Hauler Program and Manifesting” adequately reflects this revision.

Activity Funding

FYs 2011/2012–2015/16.....\$450,000 per fiscal year

Cleanup, Abatement, and Remedial Action

Activity Description and Budget

The cleanup program will continue to remediate sites with CalRecycle-managed contractors and grants to local governments for amnesty events and cleanup of illegal piles. In addition, CalRecycle will provide funding to the Farm and Ranch Solid Waste Cleanup Grant Program to further mitigate future accumulations of waste tires. Also, CalRecycle will establish an emergency reserve account, which cannot exceed \$1 million, as directed by SB 876. Table 8 provides a list of activities and associated budgets for the element titled “Cleanup, Abatement, or Other Remedial Actions Related to Tire Stockpiles throughout the State.”

Table 8: Budget for Cleanup, Abatement, and Remedial Action

Program Area	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
Short-Term Remediation Projects	\$400,000	\$400,000	\$300,000	\$300,000	\$300,000
Local Government Waste Tire Cleanup Grant Program	\$1,100,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Local Government Amnesty Grants	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000
Emergency Reserve Account	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Farm and Ranch Solid Waste Cleanup and Abatement Grant Program*	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000
Totals	\$4,100,000	\$4,000,000	\$3,900,000	\$3,900,000	\$3,900,000

* Funds transferred to Farm and Ranch Solid Waste Cleanup and Abatement Grant Program.

- 1. Short-Term Remediation Projects:** [PRC section 42846](#) allows CalRecycle to perform any cleanup, abatement, or remedial work required to prevent substantial pollution, nuisance, or injury to the public’s health and safety at waste tire sites where the responsible parties have failed to take appropriate action. These efforts may include stabilizing piles until removal, removing all waste tires, and/or remediating the site after the tires have been removed. CalRecycle funds short-term remediation of illegal waste tire sites with CalRecycle-managed contracts. Funds allocated to remediation efforts may roll over from one fiscal year to the next. CalRecycle staff will continue to move aggressively to remediate the sites on the short-term projects list as they become known through enforcement actions or by other means.

Activity Funding

FYs 2011/12–2012/13 \$400,000 per fiscal year
FYs 2013/14–2015/16 \$300,000 per fiscal year

- 2. Local Government Waste Tire Cleanup Grant Program:** Under this grant program, local governments including local enforcement agencies, county and city departments, fire districts, code enforcement agencies, irrigation districts, and qualifying Indian tribes are eligible for funding. Grants are awarded to pay for the cost of cleanup, abatement, or other remedial actions related to the illegal disposal of waste tires.

For the period including FYs 2008/09–2009/10, demand for the program has averaged approximately \$1,038,000 per fiscal year. Activity is expected to remain approximately \$1,000,000 per fiscal year.

Activity Funding

FY 2011/12.....\$1,100,000
FYs 2012/13–2015/16.....\$1,000,000 per fiscal year

3. **Local Government Amnesty Grants:** This grant program is designed to help divert waste tires from landfill disposal and prevent illegal tire dumping. California cities, counties, special districts, other political subdivisions and jurisdictions joined together by formal agreements, as well as qualifying Indian tribes, are eligible to apply for these competitive grants. A waste tire amnesty event allows private citizens to take waste tires, in non-commercial quantities, to a specific location established by the local government administering the grant program.

For the period including FYs 2008/09–2009/10, demand for the program has averaged approximately \$1,281,000 per fiscal year. This program is expected to see an increase in demand as more local governments attempt to address problems associated with illegal dumping by offering amnesty events. Activity is expected to remain approximately \$1,200,000 per fiscal year.

Activity Funding

FYs 2011/12–2015/16.....\$1,200,000 per fiscal year

4. **Emergency Reserve Account:** SB 876 required CalRecycle to create and maintain an emergency reserve account which shall not exceed \$1 million. Funding for FYs 2011/12–2015/16 is proposed at \$1,000,000. These funds will be used to respond to emergencies involving waste tires (e.g., tire fires). This emergency reserve account is subject to change depending on the need for emergencies that arise. While CalRecycle is required to maintain \$1,000,000 in this account with expenditure authority for emergency purposes, more than \$1,000,000 may be expended on a yearly basis. If allocated funds are not expended, funds may be carried forward to the fund balance in the following fiscal year.

Activity Funding

FYs 2011/12–2015/16.....\$1,000,000 per fiscal year

5. **Farm and Ranch Solid Waste Cleanup and Abatement Grant Program:** Tire funds are transferred to the Farm and Ranch Solid Waste Cleanup and Abatement Grant Program to remediate solid waste that has been illegally dumped on farm or ranch properties. SB 876 requires that transferred tire funds be allocated to pay the costs of cleanup, abatement, or other remedial action related to the illegal disposal of whole waste tires on farm or ranch properties. Other non-tire cleanup costs are paid for using other program funding sources. This program cleans up sites that in the past have acted like a magnet for white goods, used oil, other trash, and waste tires. Cleaning these sites up will help deter future illegal dumping of old tires; therefore, annual funding is proposed to continue at \$400,000 for this program.

Activity Funding

FYs 2011/12–2015/16.....\$400,000 per fiscal year

Market Development & Research: Strategic Approach and Programmatic Adjustments¹

Progress to Date

CalRecycle's waste tire market development program, begun in the early 1990s, has directly contributed to the development of what is now a highly diversified and dynamic infrastructure for producing and using a wide range of tire-derived products (TDP), complemented by a robust collection, hauling, and processing infrastructure to supply those markets. As shown in Figure 1, the waste tire diversion rate increased in the 1990s from about 30 to 70 percent, largely because of an emerging ground rubber industry and gains in the use of tire-derived aggregate (TDA) in landfill civil engineering applications and use of tire-derived fuel. Since 2000, both the number of tires generated and diverted has grown, although the overall waste tire diversion rate has been relatively static, hovering in the 70 to 75 percent range. During this last decade the market diversified tremendously, with new higher-end products that use ground rubber in particular increasing their market shares. Although many factors have contributed to this, without CalRecycle's market development efforts (such as grants, the Tire Business Assistance Program (TBAP), and research and demonstration projects), market demand for rubberized asphalt concrete (RAC) and other ground rubber products and for TDA likely would be far more modest.

Program Evaluation

Despite this overall success, the diversion rate plateau in the 70 to 75 percent range is troubling. CalRecycle has an overall goal of diverting 90 percent of waste tires from landfill disposal by the year 2015, and it will be difficult to reach this goal without additional effort. Consequently, CalRecycle contracted with R.W. Beck (henceforth termed "Beck") to conduct an evaluation of CalRecycle's waste tire market development programs.

Beck concluded that "For a variety of reasons, CalRecycle does not appear to be on track to achieve its 90 percent diversion target.... Areas highlighted for improvement include the need to adopt and articulate a compelling strategic approach that can better focus the wide range of efforts underway addressing the key barriers that restrict market growth and diversification, as well as the need for stronger performance measurement." Even so, Beck concluded that "CalRecycle appears to have been relatively on target with respect to addressing marketplace needs and priorities within individual programs." But perhaps of greater significance, Beck's conclusion also was based on a number of trends that could have significant negative implications for the future growth of end-use markets. These include, for example, Federal regulatory proposals that would restrict the use of tire-derived fuel in cement kilns and other applications², unpredictable changes in export markets, and concerns about health and safety impacts of some products.

Beck provided specific programmatic recommendations that could be implemented with existing CalRecycle authority and several policy options that would require statutory change. Beck concluded that the programmatic adjustments made under existing CalRecycle authority would only increase the diversion rate to about 79 percent and that policies requiring statutory changes (such as procurement mandates, landfill bans, or product stewardship requirements) would be needed to reach the 90 percent

¹ Add citation/attribution to Beck

² Beck estimated that this could affect 5.7 million or more passenger tire equivalents of demand and that disposal would likely increase as a result.

diversion target. While CalRecycle does not agree with all of Beck's recommendations, it does concur with many, including the need for a more formalized strategic framework and a range of programmatic adjustments. CalRecycle's overall strategic approach and a summary of the programmatic adjustments it is making are described in the following two subsections; the programmatic adjustments are further incorporated and described in appropriate sections of this Plan. However, because the Plan's express purpose is to allocate available funding from the Tire Recycling Management Fund given CalRecycle's existing budgetary expenditure and statutory authority, and because the Legislature itself has not established a particular goal for waste tire diversion³, the proposals for legislative change are not discussed in detail in this Plan.

Overall Strategic Approach

CalRecycle's goal continues to be achieving 90 percent diversion of waste tires from landfills by the year 2015.⁴ Affiliated goals include:

- developing long-term, sustainable, and diversified market demand for California tire-derived products;
- developing a high-quality supply infrastructure to meet that demand; and
- fostering information flow and technology and product development so that diversion goals are achieved with supply and demand in balance.

In general, CalRecycle's overall strategic strategy is to foster growth in a diverse array of end-uses, based on guiding principles described below and the application of various market development mechanisms. CalRecycle's efforts in part focus on markets with the greatest potential for overcoming barriers and for growing significantly, and on fostering higher-value end-uses. However, because markets are dynamic and subject to numerous domestic and international influences, CalRecycle also focuses some of its efforts on fostering lower-end markets (such as the use of TDA) that can also result in increased diversion. CalRecycle recognizes that some of these end-uses are more expensive than others on a dollar-per-tire basis, and that some tire-derived products do not consume large numbers of waste tires. Yet CalRecycle also believes it is important to have a rich variety of outlets and end-uses for waste tires in order to ensure long-term sustainable and adaptable markets.

In the long run, as products and applications become more viable commercially, CalRecycle expects that the state can gradually play a reduced role. Even this supposition, however, must be tempered by the reality of the economic conditions being faced by the state, local governments, and the private sector. Investments by local governments in projects that use tire-derived products and that are generally accepted as providing long-term cost savings, may nevertheless be avoided because of current and hopefully short-term budget deficits. As a result, CalRecycle has to tread a delicate line in trying to reduce its role, particularly in moving away from using grants to stimulate various markets.

³ CalRecycle's 90 percent goal is not codified in statute but reflects CalRecycle's strategic directives.

⁴ CalRecycle's diversion estimates and goal are based on the number of whole tires that are used to make products or flow to other non-landfill locations; they are not adjusted for residuals such as fluff and steel.

Specific Programmatic Adjustments

Based on the Beck program evaluation, subsequent stakeholder workshops, and staff and management discussion, CalRecycle is planning the following major programmatic changes in the market development and research sections of this edition of the Plan:

- Increasing the visibility and amount of technical assistance, training, and education provided to targeted audiences, for example by expanding training based on completed research and increasing technical assistance to individual grantees and potential end-users, as well as by coordinating this with more general outreach and promotion activities.
- Refining the annual market survey and analysis by including new information on market trends and opportunities that can be used in establishing subsequent grant criteria and priorities.
- Establishing a TDA grant program by shifting a portion of funding allocated to RAC Use grants, and including preference criteria within the program for funding to overcome transportation barriers.
- Continuing the RAC Use grants, but with reduced funding in out-years for second-time users of RAC.
- Continuing allocations for the Tire Loan Program, but with new criteria requiring applications for additional ground rubber production capacity to demonstrate the regional need for such capacity, and by seeking loan applications to address specific market needs such as for TDA supply or feedstock conversion.
- Streamlining and strengthening grant reporting and case studies.
- Focusing research on civil engineering applications, highway construction applications and on a variety of technologies using waste tires, as well as soliciting ideas for innovative research.
- Adjusting the next TBAP contract by: adjusting business eligibility criteria and funding award levels for individual business assistance to be more transparent by streamlining the process, and promoting priority products and innovative marketing for assistance; adjusting industry-wide support activities to focus on tangible assistance (e.g., disseminating sales leads, developing more effective marketing relationships with key customer groups such as CalTrans and other state agencies, expanding the product catalog, and gathering information on TDP product performance and cost); and increasing performance tracking.
- Developing a coordinated outreach and promotion plan that integrates these activities across programs.
- Refining performance measurements so that they are more directly tied to assessing the effectiveness of programmatic activities.

These changes will help optimize CalRecycle's activities, focus them on high and medium market opportunities, and ensure that they are more soundly based on market forces. But, as noted above, this may only increase diversion to perhaps the 79 percent range. To achieve 90 percent diversion, additional funding mechanisms or new policies may be required that would essentially push market expansion ahead of what can be achieved through the current approach. Where it has statutory authority, CalRecycle has included some new funding opportunities within this Plan (e.g., for TDA grants and increased technical assistance), balanced by reductions in other existing activities. Other policies that could push the market more dramatically would require legislation. These include, for example, mandating TDP/TDA use by local and state agencies, requiring Caltrans to use only California waste tire-derived material in its RAC applications, promoting tire-derived fuel, banning landfill disposal, or requiring a product stewardship approach for waste tire end-of-life management. Each of these has advantages and disadvantages, and each would be very controversial.

Guiding Implementation Principles

In assessing activities to achieve its broad goals and in implementing the programmatic adjustments described above, CalRecycle also seeks to adhere to several guiding principles. First, market development (including research, and outreach and promotion) is part of CalRecycle's broader tire management strategy that aims to protect public health and safety and the environment and to conserve

natural resources.⁵ CalRecycle's market development efforts have to complement these broad goals, not compromise them. Second, CalRecycle strives to achieve its recycling market development goals in a fair and equitable fashion, using program resources cost-effectively. Third and related to the second principle, maximizing waste tire diversion from landfills requires building new market opportunities, enhancing existing markets, and removing barriers that retard private-sector market expansion and that cause market instability. This includes selective use of state funding, targeting changes that would not occur without state programs, and diverting additional tons from disposal as opposed to moving materials from one market to another.

This latter principle is easily stated but difficult to implement. Key questions raised by some stakeholders are whether waste tire end-use markets would continue to expand without CalRecycle funding, and whether CalRecycle's programs effectively divert additional tons from disposal as opposed to simply moving waste tires from one market to another. At least for certain products such as TDA that do not yet exhibit mature markets, state support in some manner remains key to their growth. But continued state support may sometimes benefit established markets or users that do not require support to function, and it is not always clear in these cases that additional tons are being diverted as a result. For example, one unresolved issue in the program evaluation is whether or not there would have been expanded use of RAC and other TDPs without CalRecycle's grant programs, and whether these grants diverted tires that would have gone to other markets anyways.⁶ This is extremely difficult to ascertain, although it makes sense in general to consider spending less funds on grants for mature market uses, as long as adequate technical assistance is available for end-users in those markets, and to improve reporting by grantees so that the effectiveness of grants is more readily understood.⁷ Even so, it is always possible as demand grows and diversifies that some waste tires will move from one market to another. These will continue to be some of CalRecycle's main challenges going forward.

Market Demand Priorities

Based on annual market analyses, the program evaluation, and analyses of current and projected market use and potential, opportunities that appear to have the potential for significant market growth and that have a need for some government support include: 1) ground rubber, specifically RAC applications and molded and extruded products; 2) civil engineering applications TDA in transportation uses (highway retaining walls, lightweight fill, and light rail projects) and in landfill uses; and 3) mulch/bark. More

⁵ The overall success of these complementary approaches -- which include the permitting, cleanup, manifest, and cleanup activities described elsewhere in this document -- is reflected by the fact that large illegal tire piles and associated fires no longer exist in California.

⁶ Beck has communicated to CalRecycle that "We were unable to find data that would objectively and conclusively address the question of under what circumstances grants are more or less likely to catalyze lasting demand, versus having limited impact during the grant period only. Anecdotally, it seems clear that some grants do certainly help to catalyze demand, and that the grants do have a positive impact on TDP sales. After careful consideration, we concluded ... that the best approach at this time is to be cautious and strategic in grant making by continuing (as CalRecycle has done for several years) to regularly review grant programs to ensure that they are targeting top priority market segments, that the cost per tire is reduced over time, and that grantees requesting a second grant for the same type of product receive lower priority. We also recommend potentially expanded market research to identify products that may not need state support, and enhanced data gathering from grantees to help evaluate evolving barriers and advantages by product type."

⁷ Some stakeholders suggest that CalRecycle use the costs per tire diverted as a measure of effectiveness. However, in general the costs per diverted tire for functions such as R&D and for grant programs focused on less mature markets will be higher than the costs per diverted tire for education and training, policy adoption, and outreach and promotion. This means that strict comparisons of the cost per tire diverted are not necessarily appropriate. Furthermore, markets in early stages of development may warrant more upfront investment.

moderate but still important opportunities for market expansion also exist within these two categories: 1) ground rubber, specifically turf and athletic fields, loose-fill playgrounds, and pour-in-place playgrounds; and 2) civil engineering applications for other uses such as septic tank leach fields and residential retaining walls. However, CalRecycle reiterates that its approach is oriented towards developing a wide array of end-uses, of both higher and lesser value.⁸ As such, additional effort may well be warranted even for mature end-uses markets.

Market Development Mechanisms

CalRecycle also recognizes that different market development mechanisms may be more or less appropriate for achieving its broad goals, in accordance with the guiding principles and focused on the priorities discussed above. These mechanisms can be categorized as:

- Research and development (R&D) for unproven products, to identify prospective TDPs, document their potential, and identify challenges
- Business and technical assistance and funding (e.g., grants, loans) for demonstrated but not fully proven products and processes
- Education and training to encourage and help prospective customers try proven TDPs and address supply side barriers;
- Policy adoption, such as via specifications or legislation, to help encourage widespread commercial adoption, and
- Outreach and promotion as needed to help maintain and encourage ongoing use of established products.

In developing the market development and research portions of this Plan, CalRecycle has attempted to reflect all of these considerations – goals, guiding principles, market priorities, and market development mechanisms -- in making funding allocations that are designed to overcome critical market barriers and realize market expansion opportunities.

⁸ As Beck noted, “....these priorities are not intended to express any type of value judgment regarding which market segments are more desirable than others. Given CalRecycle’s 90 percent diversion goal the priorities are solely intended to indicate which market segments at this particular moment in time, should be focused on in order to move toward that goal..... building demand for civil engineering applications is prudent and need not be done at the expense of ground rubber markets.”

Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires

Activity Description and Budget

The research program will concentrate on activities that support increased use of rubberized asphalt concrete, civil engineering applications, and other tire-derived products. Table 9 provides the budget for the element titled “Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires.”

Table 9: Budget for Research Directed at Promoting and Developing Alternatives to the Landfill Disposal of Tires

Program Area	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
CE Applications for Waste Tires	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Research on Highway Construction Applications Using Waste Tires	\$500,000	\$0	\$500,000	\$0	\$500,000
Research on Technologies Using Waste Tires	\$0	\$500,000	\$500,000	\$500,000	\$500,000
Totals	\$1,000,000	\$1,000,000	\$1,500,000	\$1,000,000	\$1,500,000

- 1. Civil Engineering Applications for Waste Tires:** Although CalRecycle has made significant progress promoting the use TDA in civil engineering applications in fact, CalRecycle has successfully partnered with both state and local governments to complete projects that have demonstrated the performance and cost effectiveness of TDA. As a result of these partnerships, advocates were created who are committed to using TDA in future projects, but will also help promote CalRecycle's marketing efforts by getting others to use it as well. However, there is still much work that needs to be done to establish this use of waste tires as an accepted material.

This activity will continue CalRecycle's program of investigating new civil engineering uses for waste tires, including partnering with State, local, and private-sector engineers to conduct research and educate them on the use of TDA in these projects. For research projects focusing on specific civil engineering uses of waste tires, project-specific contracts may be implemented. These projects could include, but are not limited to, erosion control, earthquake damping, vibration mitigation, retaining and sound walls, stormwater runoff/drainage control, and septic tank leach field applications. Once a project is constructed, the associated contract is also used for ongoing monitoring to determine the long term performance of the TDA in the civil engineering application.

Activity Funding

FYs 2011/12–2015/16.....\$500,000 per fiscal year

- 2. Highway Construction Applications Using Waste Tires:** CalRecycle has made significant progress promoting RAC and, as a result, its use continues to increase statewide. However, there are several applications that CalRecycle is continuing to study to gain additional information regarding benefits and drawbacks. Nevertheless, these applications do have the potential to use waste tires. Some of

these applications may include: terminal blend asphalt concrete, warm mix asphalt concrete, and rubberized chip and slurry seals. Under this program element, CalRecycle will research these applications in order to determine their benefits. Pilot studies may be conducted for one or all of these applications if it is deemed necessary to further evaluate their benefits.

If the ongoing research supports the benefits of these applications, then CalRecycle can market and promote the use of these applications by including them in future grant offerings, with the aim of enhancing sustainable markets for additional waste tires. Additionally, CalRecycle staff will evaluate current design standards and investigate pavement preservation strategies that use rubber and increase the lifespan and performance benefits (i.e., resistance to reflective cracking, skid resistance, noise reduction) of pavements. For example, it is well documented that rubber chip seals outperform conventional chip seals; however, improvements in mix design and range of use are continuously evolving and may warrant further investigation.

Activity Funding

FYs 2011/12, 2013/14, and 2015/16\$500,000 per fiscal year

3. **Research on Technologies Using Waste Tires:** CalRecycle will continue to investigate technologies that utilize waste tires to study and determine whether they are viable in the current tire market and if there are health and safety impacts that could adversely impact their use. Some of these applications may include: Identification of human health and environmental risks associated with TDP (i.e., rubber mulch and bark, artificial turf fields, etc.); feasibility of using crumb rubber in molded and extruded products including plastic rubber; partner with Universities, state agencies, and USEPA to conduct research on new products and applications derived from waste tires; and conduct study to compile TDP performance and cost information.

Activity Funding

FYs 2012/13–2015/16\$500,000 per fiscal year

Market Development and New Technology Activities for Waste and Used Tires

Activity Description and Budget

The Market Development Program is focusing RAC, TDA, and TDPs that use the largest number of tires. Since the largest number of tires can be diverted through RAC and TDA applications, significantly more resources are being devoted to them. To assure that tire-derived product businesses can meet the demand, the business assistance program will work closely with the industry to expand existing businesses and attract new ones. Table 11 provides the budget for this element.

Table 11: Budget for Market Development and New Technology Activities for Waste and Used Tires

Program Area	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
Outreach Campaigns	\$3,200,000*	\$500,000	\$500,000	\$1,250,000	\$1,250,000
TDA Civil Engineering Technical Support	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
TDA Grant Program	\$1,500,000	\$2,500,000	\$2,500,000	\$3,000,000	\$3,000,000
RAC Technology Centers	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
RAC Technical Assistance Contract	\$1,325,000*	\$750,000	\$750,000	\$750,000	\$750,000
Rubberized Pavement Grant Program	\$5,600,000	\$4,500,000	\$4,000,000	\$3,500,000	\$3,500,000
Tire-Derived Products Grants and Pilot Retailer Rebate Program	\$3,400,000*	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Tire-Derived Product Business Assistance Program (TBAP)	\$674,000	\$2,000,000	\$2,126,000	\$2,500,000	\$2,500,000
Tire Equipment Loan Program	\$4,302,000*	\$4,501,000	\$4,175,000	\$3,601,000	\$3,051,000
Development of Integrated Waste Tire Management Plan for the State of Baja California (Phase Two)	\$150,000	\$0	\$0	\$0	\$0
Spanish Translation Services	\$50,000	\$0	\$50,000	\$0	\$50,000
WRAP Activities	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000
Tire Events	\$30,000	\$100,000	\$100,000	\$100,000	\$100,000
Totals	\$21,104,000	\$20,724,000	\$20,074,000	\$20,574,000	\$20,074,000

** Additional funding in FY 2011/12 was received through a Budget Change Proposal for these activities*

1. **Public Outreach:** This activity contains two outreach initiatives to increase public awareness about tire sustainability and the many benefits of waste tire recycling. Additional opportunities for public promotion/outreach may also be explored in coordination with other waste tire recycling activities, as resources and funding permits.

Tire Maintenance Sustainability Outreach:

This statewide campaign will focus primarily on improving tire maintenance behaviors among Californians. The campaign will educate drivers about how to conduct proper tire maintenance, explain the many environmental benefits of tire sustainability, and encourage consumers to leave their old tires at the dealer when buying new ones. To meet behavioral change objectives this effort will utilize strong partnerships with state agencies and other organizations, incorporate public input, and rely on variety of studies and information gained through prior research efforts. CalRecycle will make air pressure checks, tread, and overall tire care information easily accessible to the public.

Rubberized Asphalt Concrete and Tire-Derived Aggregate Outreach:

This statewide campaign will market and help promote RAC and TDA uses in civil engineering projects. This campaign will focus on educating local governments and city planners and serve to enhance CalRecycle's current efforts to help promote TDP use in local jurisdictions. A small portion of this campaign will be focused on educating the general public about TDPs and their benefits.

TDP Awareness/Co-Operative Advertising Campaign:

This campaign would support a targeted retailer rebate/subsidy program to be piloted under the **Tire-Derived Products Grants and Pilot Retailer Rebate Program**. These monies would be used to increase consumer awareness of TDPs and/or to leverage a co-operative advertising campaign by participating retailers which could include local/regional ad (print/electronic/internet) placement, point of sale displays, and other effective marketing efforts. Estimated allocation is \$500,000 in FYs 2012/13 and 2013/14 reducing to \$250,000 in FY 2014/15

Activity Funding

FY 2011/12.....	\$3,200,000
FY 2012/13.....	\$500,000
FY 2013/14.....	\$500,000
FYs 2014/15-2015/16.....	\$1,250,000 per fiscal year

2. **Tire-Derived Aggregate Civil Engineering Technical Support:** CalRecycle will provide technical support and education as a component of the proposed new TDA grant program. It has been demonstrated that technical support is an important component of the success of the RAC grant program and a similar methodology will be utilized in this new program. The contractor will provide technical support to grantees under a new technical assistance contract component. This technical support may address issues associated with the use of TDA in civil engineering projects. Typical projects may include applications such as lightweight fill, landfill applications, and vibration damping layers in light-rail projects.

The technical assistance contract component will also include marketing and promoting the use of TDA through a technical marketing and education outreach plan. This will be accomplished by: video documentation and assisting in the coordination of media events of TDA demonstration projects and also through the development and distribution of TDA technology transfer materials that showcase the performance and cost benefits of using TDA. The technical assistance contract component will include presentation of these materials and assistance to CalRecycle as a TDA advocate and liaison at various key stakeholder group workshops and conferences.

Activity Funding

FYs 2011/12-2015/16.....\$750,000 per fiscal year

3. **Tire-Derived Aggregate Grant Program:** Based on the success of the rubberized asphalt grant program CalRecycle proposes to implement a TDA grant program. The goal of this program will be to provide funding to local governments, public entities and private businesses for civil engineering projects utilizing TDA. The projects which may receive grants will need to utilize TDA and may include landslide repair, gravel replacement in landfills, rail lines, retaining walls, and other civil engineering projects. Proposed projects will be required to utilize the TDA for its unique engineering properties such as light weight and free draining.

Activity Funding

FY 2011/12.....\$1,500,000
FYs 2012/13-2013/14\$2,500,000 per fiscal year
FYs 2014/15-2015/16.....\$3,000,000 per fiscal year

4. **Rubberized Asphalt Concrete Technology Centers:** The training centers provide statewide technical assistance to local governments located in both Northern and Southern California through direct consultation, and presentations at local and regional workshops.

Activity Funding

FYs 2011/12-2015/16.....\$100,000 per fiscal year

5. **Rubberized Asphalt Concrete Technical Assistance Contract:** The success of CalRecycle’s RAC programs has been due in part to the technical support that has been provided through CalRecycle’s RAC technical assistance contract. The contractor will continue to provide technical support and education to local government grantees and CalRecycle under a new technical assistance contract. This technical support may address issues associated with roadway projects including rubber hot-mix, rubber chip seal, rubber cape seals, and other emerging paving applications that use tire-derived materials that have been determined by CalRecycle to have benefits derived from the use of recycled tires. The technical assistance contractor will also serve as the liaison at various stakeholder workshops and conferences that will help promote RAC programs.

The contractor will also assist CalRecycle in developing and implementing a cooperative purchasing program to address obstacles to wider use of RAC by rural agencies. Rural local government agencies typically have smaller paving budgets and are not located in close proximity to RAC facilities. Because these constraints would result in smaller projects and higher transportation costs, rural agencies are frequently unable to use the product. Through this program the contractor will coordinate the participating agency projects and provide design assistance, specification review, bidding/procurement, construction management and quality assurance and quality control. In addition the contractor will provide training to each participating agency so that they can carry out future cooperative purchase projects on their own.

The technical assistance contractor will also assist CalRecycle with marketing and promoting the use of RAC. This will be accomplished through the development and distribution of technology transfer materials that showcase the benefits of using RAC. The technical assistance contractor will present these materials and serve as a RAC advocate and liaison at various key stakeholder group workshops and conferences.

The technical assistance contractor will also assist CalRecycle with marketing and promoting the use of RAC. This will be accomplished by: video documentation and assisting in the coordination of media events of TDA demonstration projects and also through the development and distribution of technology transfer materials that showcase the performance and cost benefits of using RAC. The technical assistance contractor will assist CalRecycle in presenting these materials and serving as a RAC advocate and liaison at various key stakeholder group workshops and conferences.

Activity Funding

FY 2011/12.....	\$1,325,000
FYs 2012/13-2015/16.....	\$750,000 per fiscal year

- 6. Rubberized Pavement Grant Program:** The Targeted Incentive Grant Program and the Rubberized Chip Seal Grant Program (collectively referred to as the Rubberized Pavement Grant Program) will continue to be offered to local governments. The program is designed to assist in creating long-term sustainable markets by focusing on first-time and limited experience users of rubberized paving.

Activity Funding

FY 2011/12.....	\$5,600,000
FY 2012/13.....	\$4,500,000
FY 2013/14.....	\$4,000,000
FYs 2014/15 and 2015/16	\$3,500,000 per fiscal year

- 7. Tire-Derived Products Grants and Pilot Retailer Rebate Program:** This program, with both grant and retail rebate components, is designed to expand demand for TDP, encourage the appropriate substitution of recycled rubber for virgin rubber (also known as “feedstock conversion”) and expand the use of waste tire-derived material to include higher value-added products. It expands the existing TDP Grant program and will be implemented through grants, subsidies and/or contracts with public entities, businesses and/or other enterprises. TDP Grant applicant eligibility, product eligibility, project eligibility, evaluation process and maximum award amounts will be determined by CalRecycle, using input from stakeholder meetings, the annual tire market survey, and other sources.

While the TDP Grant component of the program targets public entities (primarily cities and counties) the new pilot Retailer Rebate component will focus on expanding consumer demand for TDPs. Typical TDPs may include, but are not limited to, various landscaping and garden products such as mulch, paving stones, borders, planters, etc.; building and home products such as floor mats, molding, flooring underlayment, garage flooring, paint and coatings, etc.; and contractor-related products such as traffic cones, delineators, spacers, barricades, fencing, etc. The RR component will be implemented through subsidies, and/or contracts with retail stores (or by a third-party company specializing in administration of retail rebate programs). The specifics regarding retailer participation (including cooperative advertising), specific TDP products and TDP requirements (including minimum recycled rubber content and other thresholds) shall be determined by CalRecycle, again using input from stakeholders and affected parties. Funding for the pilot Retailer Rebate component is estimated at \$1,600,000 for FYs 2012/13-2015/16 and is included in the overall program funding below.

Activity Funding

FY 2011/12	\$3,400,000
FYs 2012/13–2015/16	\$5,000,000 per fiscal year

8. **Tire-Derived Product Business Assistance Program:** This program is designed to increase demand for TDPs, foster new technologies and expand the use of waste tire-derived material to include higher value-added products. Additionally, the program provides assistance to businesses that diversify existing and create new products through a variety of methods. These include building market capacity and improving the operational and cost efficiencies of tire-derived product businesses by providing technical and consultative assistance. Eligible businesses may apply for assistance to: (1) evaluate, diversify, and improve their business plan and operations, (2) enhance marketing efforts, and (3) test and certify new products.

Staff and an independent consultant will perform an analysis of the businesses to identify needs and associated costs. Examples of TDP business assistance include, but are not limited to:

- General (business plan development or modification, human resource issues, inventory management/control [including just-in-time inventory systems], asset management, appropriate business structure, appropriate or optimal financial structure, accounting systems and controls, website development or modification, etc.).
- Technical (efficient plant design, manufacturing process improvement or optimization, optimizing specific equipment performance, increasing the amount/percentage of recycled material, converting to recycled material from virgin material, diversifying existing processing to meet market demand, etc.).
- Marketing (marketing plan development or modification, product pricing, product promotion, product packaging, distribution systems, cooperative marketing, ad placement, trade shows, etc.).
- Product Testing and Certification (testing products to satisfy the marketplace requirements of the public and private sectors).
- Identification of funding sources including loans to purchase equipment that can be used to process tires, make TDPs or extend the life of existing tires.

Sector-wide activities will include a small number of projects designed to promote the TDPs industry and to provide analysis and research to support growth in the industry.

This program will be run in cooperation with the Recycling Market Development Zone Program.

Activity Funding

FY 2011/12.....	\$674,000
FY 2012/13.....	\$2,000,000
FY 2013/14.....	\$2,126,000
FYs 2014/15-2015/16.....	\$2,500,000 per fiscal year

9. **Tire Equipment Loan Program:** In order to encourage tire recycling manufacturers to site new facilities and expand existing operations, the Tire Loan Program will provide low-interest loans for the purchase of equipment for TDPs consistent with the existing Recycling Market Development Zone Loan Program. All eligibility, terms and conditions would be consistent with the existing loan program, except loans will be available to all tire recycling manufacturers located in California that make TDPs, whether located within development zone or not. Funds would be tied directly to efforts to increase processing of waste tires, and production of final products, where markets exist for those products. Loans for shredding tires at landfills and monofills would only be for activities designed to divert shredded material for TDPs.

Activity Funding

FY 2011/12.....	\$4,302,000
FY 2012/13.....	\$4,501,000
FY 2013/14.....	\$4,175,000
FY 2014/15.....	\$3,601,000
FY 2015/16.....	\$3,051,000

10. Development of Integrated Waste Tire Management Plan for the State of Baja California

(Phase Two): CalRecycle is currently contracting with the University of California, Berkeley for the Technical Assistance for the Creation of a Methodology for the Development of a Model Border Integrated Waste Tire Management Plan Framework for the State of Baja California, Mexico. The contract consists of a first phase in developing the model framework that includes research, analysis and the creation of the methodology to develop the model framework. Phase one is scheduled to be completed by spring 2011. Through a separate agreement phase two will have the contractor use the methodology, information and resources developed through the phase one contract to create the model framework and provide technical assistance.

Activity Funding

FY 2011/12.....	\$150,000
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11. Spanish Translation Services: This contract would provide both verbal interpretation and written translation from English to Spanish and Spanish to English. These services would be used for tire events, reports and educational material that are of interest to the border area.**Activity Funding**

FYs 2011/12, 2013/14, and 2015/16.....	\$50,000 per fiscal year
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12. WRAP Activities: The Waste Reduction Awards Program provides an opportunity for California businesses to gain public recognition for their outstanding efforts to reduce waste through efficient use of resources and other waste prevention practices. All businesses and private nonprofit organizations with California facilities are encouraged to apply. The program would also include an increase in outreach efforts to automotive and tire-related businesses.**Activity Funding**

FYs 2011/12–2015/16.....	\$23,000 per fiscal year
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13. Tire Events: As it has in past years, CalRecycle will continue to hold tire workshops, forums, and/or trainings. These tire business/product events will provide attendees with up-to-date information about waste tire management programs. They provide a venue to discuss all aspects of waste tire management, including hauling, manifests, cleanup, proper disposal, recycling technologies, and research and market development activities. These events also offer a venue for staff and stakeholders to meet and focus on issues of common concern. Wherever possible, events will be conducted in conjunction with related events organized by organizations such as the League of California Cities, California Public Works Association, California State Association of Counties, etc. In addition, staff has combined the Tire, Used Oil/Household Hazardous Waste, and Recycling Market Development Zone Conferences and Training Workshops into one combined three-year contract to provide efficiencies of scale and other benefits. All events will also be coordinated with CalRecycle's Office of Public Affairs.

Activity Funding

FY 2011/12.....\$30,000

FYs 2012/13- 2015/16.....\$100,000 per fiscal year